

Zeiss 1540XB FIB-SEM

Instrument capabilities:

1. Instrument specifications:
 - 30 kV maximum accelerating voltage for both FIB and SEM
 - Schottky FEG emitter (SEM)
 - SEI resolution: 1.1 nm at 20 kV; 2.5 nm at 1.0 kV
2. Specimen stage:
 - 6-axis motorized eucentric stage.
 - Maximum sample size: 100 mm diameter.
3. Operating modes:
 - simultaneous FIB (Ga-beam only) and SEM
 - 5 gas injectors and 3 *in situ* manipulators
 - SEI, BEI, STEM
 - light element XEDS (mapping & spectrum imaging)
 - ion beam lithography
 - EBSD/OIM (expert users only; not for assisted users)

Typical experiments (examples):

- Site-specific TEM sample preparation
- 3D data acquisition
- nanofabrication and manipulation

